

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/40137

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B60J 7/08, 7/20; B60R 21/13
 US CL : 296/107.01, 107.08, 107.09, 107.17, 203.01

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 296/107.01, 107.08, 107.09, 107.17, 203.01, 193.02, 193.04

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ---	US 5,641,193 A (ZEPNIK et al.) 24 June 1997	1-11
Y		12
X	US 6,352,298 B (HAYASHI et al.) 5 March 2002	13
Y	US 6,293,605 B (NEUBRAND) 25 September 2001	12
A	US 6,443,517 B (JUST et al.) 3 September 2002	1-14
A	US 6,431,637 B (MAASS) 13 August 2002	1-14
A	US 6,227,604 B (GRACE) 8 May 2001	1-14
A	US 5,881,458 A (WOLF et al.) 16 March 1999	1-14
A	US 4,832,397 A (SCADUTO) 23 May 1989	1-14

☒ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:

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 * "O" document referring to an oral disclosure, use, exhibition or other means
 * "P" document published prior to the international filing date but later than the priority date claimed

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 * "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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Date of the actual completion of the international search

28 April 2004 (28.04.2004)

Date of mailing of the international search report

24 JUN 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, Virginia 22313-1450
 Facsimile No. (703)305-3230

Authorized officer

Glenn Dayona *[Signature]*
 Telephone No. 555-555-5555

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,712,828 A (ALBRECHT) 15 December 1987	1-14
A	US 4,700,982 A (KURAOKA et al.) 20 October 1987	1-14
A	US 4,695,089 A (FUKUTOMI et al.) 22 September 1987	1-14
A	US 4,346,930 A (NORTHEY) 31 August 1982	1-14

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